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IMPACT OF SOCIOECONOMIC COMPULSION ON NPA LEVEL OF SELECT BANKS IN INDIA: A COMPARATIVE STUDY

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ABSTRACT

Purpose: The reforms in the financial sector have resulted in numerous changes in the banking sector. In order to improve the financial health of the banks, various norms have been introduced at regular intervals. As the banking sector constitutes a major component of the financial service sector, the soundness of the banking sector is necessary for a dynamic and healthy economy. The establishment of a productive, efficient and stable economy is possible only when a country is having a sound and healthy banking sector. This study has been an attempt to analyse the comparative performance of selected public and private sector banks in India during the period 2003 to 2013 on the basis of their direct and indirect contributions to the society for socio-economic growth and its impact on quality of assets or NPA level of the banks.

Sampling/Methodology: For this purpose five leading Indian banks from each of the public and private sector banks have been taken into consideration.

Findings: Findings of the study indicate that the performance of the private sector banks is better from the bankers' viewpoints but from the social viewpoints, public sector banks are better performers.

Keywords : Public and Private Sector Banks, Social Responsibility, NPA

Jel Classification: F23, M13

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Introduction:

The concept of NPA has been introduced by RBI to reflect a bank's actual financial health in its balance sheet and as per the recommendations made by the Committee on Financial System (Chairman, Shri M. Narasimham). The provisioning should be made on the basis of the classification of assets into different categories. Before March 2001, the concept of 'past due' was in practice to consider any asset as Non-Performing Asset. An amount is considered as past due, when it remains outstanding for 30 days beyond the due date. An asset becomes non-performing when it ceases to generate income for the bank. A non-performing asset was defined as credit in respect of which interest and / or installment of principal has remained

'past due' for a specific period of time. NPA which were cutting into the banks bottom lines in two ways-

Banks were not able to book interest accrued on such assets.
They had to make provisions for these NPAs.

Over the years, much has been talked about NPAs, which has also become one of the parameters to decide partial autonomy to be given to select banks. However, the emphasis so far has been only on identification and quantification of NPAs rather than on ways to reduce and upgrade them.

Though, the term NPA connotes a financial asset of a commercial bank which has stopped earning an expected reasonable return, it is also a reflection of the productivity of the unit, firm, concern, industry and nation where that asset is idling. So this situation creates a tough competition between the public and private sector banks in India to control the level of NPAs by enhancing the performance of credit recovery management to keep up their existence in the competition and at the same time to increase the social responsibility to accelerate the economic growth and to fulfill their social obligations. In both the types of banks the problem of NPAs is twofold-

- Tackling the existing NPAs.
- Preventing build up for additional NPAs.

The NPA level has to be brought down to at least 5% to 6%. For this, Indian banks need to set up evaluation of various credit risks, to develop advance skills in risk management and a need to set up speedy recovery mechanism. Hence, it is a joint responsibility of policy- makers, judiciary, entrepreneurs and bankers to collectively fight this problem. The problem of NPA's is not only affecting the banks but also the whole economy in fact high level of NPA's in Indian banks is nothings but a reflection of the state of health of the industry and trade. The banking system in India remains handicapped in the absence of an adequate legal framework to ensure expeditious recovery of loans as also enforcement of security. Comprehensive banking legislation and enforcement machinery be put in place not only to reduce the quantum of NPAs but also to ensure that such a framework serves as a deterrent for future defaulters. In

this backdrop a comparative study has been made among select public and private sector banks in India. The selection of the banks has been done keeping in mind a mix of banks on the basis of their total income and balance sheet size.

Objective of the Study

The objectives of this research work have been to:

1. To understand the social compulsion and its impact on quality of assets of selected banks from each group during the period 2003 to 2013.

2. To make an estimate of the selected banks in regard to their direct and indirect contribution into the society based on the advances to the priority sectors and wage bills payment to the employees and thereby their effect on level of NPA

Review of Literature

Initial studies on NPAs focused on incidence of NPAs and its management in India (Confederation of Indian Industry, 1999; Kumar R, 2000). Siddiqi, Rao & Thakkar (1999) conducted a study on about 800 top NPA in 17 commercial banks and found that the diversion of fund like expansion, diversification, modernization or promoting sister concerns, etc., was the most prominent reason for the growth of NPAs. They also examined the impact of priority sector advances on NPAs and concluded that 'the higher NPAs in priority sector advances have pushed up the overall proportion of NPAs of these banks by about 3% to 4%'. Baiju S. and Gabriel Simon Thattil (2000) highlighted the problem of NPAs in commercial banking sector of Indian taking the current position of scheduled commercial banks.

A panel regression confined to 27 public sector banks for five years period was performed by Rajaraman Indira and Vasistha G (2002) to investigate variations within a class that is homogeneous with respect to ownership. Some studies examined internal and external factors responsible for growth of NPAs (Chaudhuri, S., 2002; Gupta S. and Kumar S., 2004; Ghosh,

2005). Parul Bhatia (May, 2009), 'loans by banks post-recession that NPA effect'. This states that performance of financial institution can be preliminarily judged by their non-performing asset levels. It is also disclosed about classifying NPAs, recent trends of advancing loans, factual figures and views and finding NPAs.

The problem of NPAs is related to several internal and external factors confronting the borrowers (Muniappan, 2002). V.S. Datey (Feb, 2003), 'The SARFAESI Act' in this book stated as the securities and reconstruction of financial assets and enforcement of security interest Act, 2002 is a step to reduce NPAs of the financial institutions. They act also makes provision for assets reconstruction and securitization. Mohan (2003) conceptualized 'lazy banking' while critically reflecting on banks' investment portfolio and lending policy. V. Shivakumar and K. Sundar (July, 2010), 'Loans, assets management in KSFC' discussed about the loan assets management in KSFC, sector wise NPAs of

KSFC, category wise priority sector NPAs in KSFC, quality of assets in KSFC and also they provide conclusion about this topic.

Relationship between the amount of NPAs and return on assets of banks was examined by Rajput Namita (2012). Another paper studied trends in NPAs in terms of different NPA ratios for State Bank of India, Punjab National bank and Central Bank of India (Samir and Kamra D, 2013). A recent study has shown a steady improvement in the asset quality of banks after the introduction of prudential norms (Pandey J Shruti et al., 2013). Relative financial performance of ten selected commercial banks from 1998-1999 to 2012-2013 by using CAMEL approach was also studied recently (Ghosh and Rakshit, 2014). No empirical analyses have, however, been made on classifying the banks into good performing and bad performing on the basis of NPA based indicators.

Research Gap

There has been many studies done on NPA issues of banks in India, but hardly any work on to study the comparative efficiency of socioeconomic responsiveness and its impact on NPA level using such a comprehensive set of study period and sample banks. Further, hardly any study has been undertaken earlier to find out the degree of association between social compulsion and NPA level using such relevant ratios and statistical tools.

Data collection and Methodology used

For taking up the unaddressed issue and research gap, we relied on data collected from annual reports of selected banks and on secondary data collected from various issues of Reserve Bank of India's Bulletin, financial data base package 'Capitaline', RBI website and RBI's Report on Trend and Progress of Banking in India. For analyzing comparative performance between the groups, among the individual banks, the technique of ratio analysis, comprehensive rank analysis and statistical techniques like measures of central tendency and measures of dispersion have been applied at appropriate places. Social performance indicators and NPA ratios have been considered to analyze the comparative performance of selected banks between the groups and among individual banks. From various secondary resources such bank financial statements, newspaper information, bank websites and RBI websites the data related to non-performing assets were gathered. Five banks from the public sector five from the private sector were shortlisted for this study. Further, comprehensive rank test and statistical measures have been used for the analysis.

Examination of Asset Quality or Non-Performing Assets (NPAs) of the selected Public and Private Sector Banks:

The quality of assets is very important to gauge the strength of any banking company. The RBI gradually reduced the time of segregating an asset into performing or non-

performing asset so that banks should take due attention in improving asset quality. A non-performing asset in the banking sector may be termed as an asset not contributing to the income of the bank. The high level of NPAs in banks has been a matter of concern and a barrier to accelerate bank financing as bank credit is a catalyst to the economic growth of a country and any bottleneck in the smooth flow of credit creates adverse repercussions in the economy. We consider two ratios corresponding to NPAs, namely, gross NPAs to gross advances (GNGA) and profit to gross NPAs (PGN). The NPA ratios are:

Gross NPAs to Gross Advances (%) denoted as GNGA
Profit to Gross NPAs (%) denoted as PGN

GNGA reflects the proportion of bad loans to total loans of a bank. Probability of either recovery or generating any income from bad loans being less, more will be the ratio, more will be the chance of getting bank's net worth eroded. It also indicates share of interest earned from advances eaten up by NPAs1. The second ratio reflects the credit risk level of banks due to presence of NPAs. For example, if the ratio is 0.60, it means when 60 percent of NPAs become loss assets, entire profit will be eroded. Less is the ratio, more is the probability of the bank becoming bankrupt. We have not considered for our empirical analyses the gross and net NPAs to total assets ratios for two reasons. First, in India, loans

and advances of banks being only 60 percent of their total assets, NPAs constitute a very small proportion of total assets (Dutta, D K, 2014). Considering only the NPAs to total assets ratio may thus underestimate the problem. Second, one can find out from GNGA the extent of total assets of a bank eroded by gross NPAs2. Besides, actual picture of bad loans is correctly captured by gross NPAs and not by net NPAs. For our empirical analyses, we presume that these two ratios are equally important and would give equal useful signals about bank's efficiency in managing NPAs. Moreover, study being based on ten year's data, fluctuation in weightage is likely to get set off. Aim of the paper is to analyse the

performance of thirty four banks in terms of these two ratios and which of them are 'good performing' and which of them are 'bad performing'. The following key has been used to denote the banks:

Bank of Baroda as BOB	Bank of India as BOI
Oriental Bank of Commerce as OBC	Punjab National Bank as PNB
UCO Bank as UCO	Axis Bank as AXIS
HDFC Bank as HDFC	ICICI Bank as ICICI
Federal Bank as Federal	ING Vysya Bank as ING Vys

[1]Since interest earned is about ten percent of gross advances, if gross NPAs to gross advances is five percent, one can say that 50 percent of interest earned has been eaten up by NPAs.

[2] For example, if gross NPAs to gross advances ratio is 0.05, gross NPAs has eroded 3% of total

assets as gross advances constitute 60% of total assets.

We calculated coefficient of variations (CVs) and mean of ratios (GNGA and PGA) of all the

10 banks for the period 2003 to 2013. Then they had been ranked individually as shown in tables 1 and 2. From the individual ranks, we further calculated the composite rank and the ultimate rank as shown on table 2.

Rank analysis

Ranks of individual banks in terms of these two ratios and CV of these ratios were found out separately. The best was assigned rank one followed by the worse once. As seen from table 1, Punjab National Bank has ranked 5th in terms of GNGA ratio and 2nd in terms of CV. The decreasing trend in CV over time from 2003 to 2013, is however quite distinct for most of the years in all the banks.

Table 1: Ranks as per two ratios of 10 Banks under study

Public Sector Banks	GNGA		PGN	
	Rank of Mean of Ratio	Rank of CV	Rank of Mean of Ratio	Rank of CV
BOB	4	1	1	1
BOI	2	3	4	2
OBC	1	5	3	5
PNB	5	2	2	3
UCO	3	4	5	4
Private Sector Banks	**GNGA**		**PGN**	
	Rank of Mean of Ratio	Rank of CV	Rank of Mean of Ratio	Rank of CV
AXIS	3	2	4	4
HDFC	1	5	1	5
ICICI	4	4	3	3
Federal	5	3	3	2
ING Vys	2	1	2	1

[Source: Ranks computed from data related to GNGA and PGN gathered from www.rbi.org.in]

From the aspect of the ratio of profit to gross NPAs, Bank of Baroda has ranked number 1 both in the mean ratio and the rank of coefficient of variation. Among the private banks, ING Vyasya the ratio GNGA and PGN had ranked same that is 2nd and 1st position. It seemed to be performing better among the private sector banks.

Table 2: Ultimate ranks of 10 banks based on mean ratio values

Public Sector Banks	GNGA	PGN	Ranks from mean of ratios	
	Rank of Mean of Ratio	Rank of Mean of Ratio	Composite rank	Ultimate ranks
BOB	1	1	2	1
BOI	2	4	6	3
OBC	[illegible]	3	8	4
PNB	5	2	5	2
UCO	3	5	9	5
Private Sector Banks	**GNGA**	**PGN**	**Ranks from mean of ratios**	
	Rank of Mean of Ratio	Rank of Mean of Ratio	Composite rank	Ultimate ranks
AXIS	3	4	8	5
HDFC	[illegible]	1	6	5.5
ICICI	4	5	6	5.5
Federal	5	5	7	7
ING Vys	2	2	3	1

[Source: Ranks computed from data related to GNGA and PGN gathered from www.rbi.org.in]

Social Performance of banks based on Priority Sector Advances and Wage Bill Payment: The commercial banks particularly public sector banks were mainly formed with the objective of nation-building and socio-economic upliftment of the Indian masses. So it has been tried to analyse the performance of the selected public and private sector banks on the basis of their direct and indirect contributions to the society for socio-economic growth. For this purpose two ratios have been selected to study the social responsiveness of the selected banks:

- Advances to Priority Sectors to Total Advances (%).
- Ratio of Wage bills to Total Income (%).

Analysis of Priority Sectors Advances as a Percentage of Total Advances:

As a matter of policy decision, the public sector banks have taken a leading role in providing finance or advances to priority sectors of the economy with the noble mission to accelerate the socio-economic growth process as a part of the social responsibility performance.

Categories of Priority Sector:

- Agriculture and Allied activities (Direct and Indirect Finance)
- Small Scale Industries (Direct and Indirect Finance)
- Small Business / Service Enterprises, Micro Credit, Education loans, Housing loans. Priority Sector Advances Ratio = (Priority Sector Advances

/ Total Advances) × 100

This ratio shows the advances made in priority sector as a percentage of total advances. Higher the ratio better is the contribution to the priority sectors by the banks out of their total advances and vice-versa.

Table 3 shows the bank wise mean priority sector advances as a percentage of total advances and the ratio of wage bills as a percentage of total income during the period 2003 to 2013. It has been observed that both these ratios registered a fluctuating trend for all the banks during the study period. Initially, in most of the cases, this ratio was high, but the banks could not maintain it. Among all the selected banks PNB showed the best performance for having the

highest mean value (37.77%) of the ratio of priority sector advances to total advances. As a whole public sector banks perform better (31.52%) than private sector banks (28.92%) as they are contributing more advances to the priority sectors out of their total advances. Consistency in the performance is found better in case of selected public sector banks as a whole because they have the lowest mean CVs (10.56%).

Table 3: Social Performance Ratios of the 10 Banks during the period 2003 to 2013

Ratios	Priority Sector Advances to Total Advances (%)		Wage Bills to Total Income (%)	
Banks	Mean	CV%	Mean	CV%
PNB	37.77	15.10	16.02	22.24
BOB	26.21	8.86	13.87	22.30
BOI	26.60	10.57	13.41	32.48
OBC	35.46	7.12	8.65	10.87
UCO	31.56	11.16	14.68	31.76
Mean Score	**31.52**	**10.56**	**13.32**	**22.43**
ICICI	25.10	30.74	5.97	37.42
HDFC	26.60	35.69	9.05	24.22
AXIS	27.56	18.16	6.69	22.73
Federal	33.30	9.97	10.52	17.83
ING Vys	33.95	6.61	14.56	11.67
Mean Score	**28.92**	**20.29**	**9.36**	**20.77**

[Source: Collected and computed from year wise RBI data base]

Analysis of Wage Bill Paid for Employees out of Total Income:

The public sector banks in India as a part of their social responsibility performance have also shown their significant attitude to enhance the wage bill of their employees such that the employees can have the opportunity to enjoy economic self-sufficiency and reduce poverty as far as possible. For this purpose ratio of wage bill to total income has been computed in this study. This ratio indicates the social obligation of the banks

from the view point of the payment made to their employees as salary, allowances and other benefits out of their total income. Higher the ratio better is the social responsibility in this regard and vice-versa.

Ratio of Wage Bill to Total Income = (PPE / Total income) × 100

PPE = Payment to and provisions for employees.

Total income includes interest income and other income.

Table 3 also shows the mean of wage bills to total income (%) of the selected banks during the study period from 2003 to 2013. The highest mean percentage of this ratio is found again in case of PNB (16.02%) under PSBs group and ING Vys (14.56%) under private banks.

Higher consistency in the performance is found in case of private banks as they have the lower average CVs (20.77%) as compared to that of the selected PSBs as a whole.

Rank Analysis:

The rank analysis has been done based on the values of different ratios computed under social responsibility performance in respect of the selected banks under study, an attempt has been undertaken to measure their comparative performance through rank analysis. For this purpose ranks have been assigned to the banks on the basis of mean values of the different ratios and thereafter composite ranks and ultimate ranks have also been assigned. Then ultimate rank has been assigned on the methodology that the bank with lowest composite rank (rank total) is given first rank position followed by second lowest composite rank and so on.

Rank based on Social Performance Ratios:

Table 4 shows the mean values and rank based on mean values of the ratios of selected banks. It is revealed from the table that PNB and BOB occupied the first rank position based on both mean PSAR and mean WBTI under the public sector group. On the other hand ING Vys bank occupied 1st rank position based on mean PSAR and mean WBTI respectively under the private sector group. For assigning the ultimate rank or final rank, 1st rank is given to the bank whose composite rank score based on mean PSAR and mean WBTI is the lowest, then

the second lowest one and so on. In terms of ultimate rank in social performance, PNB and UCO bank ranked 1st and 2nd position under public sector group and ING Vys bank ranked 1st position followed by Federal bank under private sector group.

Table 4: Composite Rank and Ultimate Rank of Social Performance Ratios of the 10 banks under study

Groups	Banks	Mean PSAR	Rank	Mean WBTI	Rank	Composite Rank	Ultimate Rank
PUBLIC SECTOR BANKS	PNB	29.266	1	16.020	1	2	1
	BOB	26.208	5	13.869	3	8	4.5
	BOI	26.607	4	13.408	4	8	4.5
	OBC	25.458	2	8.634	5	7	3
	UCO	31.578	3	14.677	2	5	2
PRIVATE SECTOR BANKS	ICICI	21.095	5	5.974	5	10	5
	HDFC	26.398	4	9.055	3	7	3.5
	AXIS	27.559	3	6.689	4	7	3.5
	Federal	33.391	2	10.522	2	4	2
	ING Vys	33.951	1	14.563	1	2	1

[Source: Computed by Author]

Correlation Analysis:

For the purpose of establishing the statistical significance of performance of the selected banks, correlation analysis between social responsibility performance and the NPA level has been undertaken. Table 5 shows that out of total 30 correlation coefficients between the ranks of social compulsion ranks and NPA level ranks, 9 cases under Pearson, Spearman and Kendall are found to be statistically significant at 5% level and 1% level, out of which 4 cases are found to be statistically significant under public sector group whereas 5 cases are found to be statistically significant under private sector group. But in case of public sector banks most of the measures are found positively correlated as compared to the private sector banks. It indicates that higher the social compulsion, higher is the NPA level. This is the case for all the selected banks apart from Bank of Baroda where slight difference has been noted through the Kendall's correlation coefficient. The private banks have shown no direct relationship between the higher NPA level and higher social compulsion. This could be due to slight difference in the regulations.

Table 5: Correlation Coefficient between Social Compulsion Rank and Non-Performing Assets Ranks of the 10 Banks

	Correlation Coefficients		
Public Sector Banks	Pearson's	Spearman's	Kendall's
PNB	0.284	0.386	0.250
BOB	0.246	0.354	(-)0.183
BOI	0.264	0.395	0.197
OBC	0.852**	0.841**	0.717**
UCO	0.563*	0.405	0.454
Private Sector Banks	Pearson's	Spearman's	Kendall's
ICICI	(-)0.792**	(-)0.458	(-)0.337
HDFC	(-)0.729*	(-)0.675*	(-)0.513*
AXIS	(-)0.832**	(-)0.379	(-)0.380
Federal	0.276	(-)0.496	(-)0.395
ING Vys	(-)0.450	0.466	(-)0.280

Note: *Statistically significant at 5% level and ** statistically significant at 1% level
[Source: Computed by Author]

An attempt has been made to find out the degree of association between Social Compulsion ranking and the NPA level rankings of the selected PSBs as a whole and the selected private banks as a whole. Table 6 shows the result of the statistical analysis carried out under different methods. The results of the analysis reveal that there is a positive association between the social responsibility performance and increase in NPAs so far as the selected PSBs in India are concerned under all the methods of correlation coefficients. It corroborates the fact that the selected PSBs in India have to face much of NPAs in consideration of their

social responsibility performance. From social viewpoint it is to be highly admired though the same is not favorable to bank management as it significantly affects the overall financial performance of the banks. It is also to be noted that as far as the social responsibility performance and NPAs forming are concerned, the selected PSBs in India have made commendable performance in comparison to that of the private banks. This view is only from the perspective of the selected banks and if viewed through the lens of the society.

Table 6: Correlation Coefficient for the 2 groups of banks

Bank Groups	Correlation Coefficient		
	Pearson's	Spearman's	Kendall's
All the selected PSBs taken together	0.469	0.543	0.332
All the selected Private Banks taken together	(-)0.878**	(-)0.607*	(-)0.495*

Note: *Statistically significant at 5% level and ** statistically significant at 1% level
[Source: Computed by Author]

Conclusion

The rise of non-performing assets crops up from non-recovery of interest and principal on loan assets. From the analysis of NPAs, the government or/and the RBI can be sure that the recovery of the banks has not been up to the mark. The reason for such performance may be made on granting advances to the priority sectors and some policies or the other of the central government that makes it difficult for banks to recover the advances made. Several steps can be taken to minimize its NPAs, like compromising with the borrowers, legal steps, rating of loan assets, constitution of assets reconstruction committee etc. But economic background, cultural and some other environmental factors are different from regions to regions of this country and they greatly influence the formats of NPAs. So to minimize the NPAs, banks should frame strategies keeping in mind all these factors and take nationwide drive to check NPAs.

In this study we have made an attempt to examine the relationship between the socio- economic factor and level of non-performing assets in two sectors of banks, public and private sectors. Here only two aspects of the socio-economic impact has been measured. Only in terms of wage bills and priority sector lending. Though in India there are several other socio-economic factors. In India, public sector banks constitute the majority of banking business and they are also strongly governed by the government and central bank's regulations. These banks are also the largest employers in the banking industry and therefore play a vital role in terms of social and economic upliftment. Being government enterprises,

these banks are compelled to abide by the regulators advice and different priority sectors including liberal advances to rural and urban areas disregarding the emergence of NPAs. From this study, we have been able to establish the direct relationship between the socio- economic factors and the NPA levels. From this study we have also seen that the banks belonging to two sectors, private and public banks show different results and that the private banks show much reluctance in social obligations. In India, public sector banks being government enterprises constitute have much social obligation between the two sectors.

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